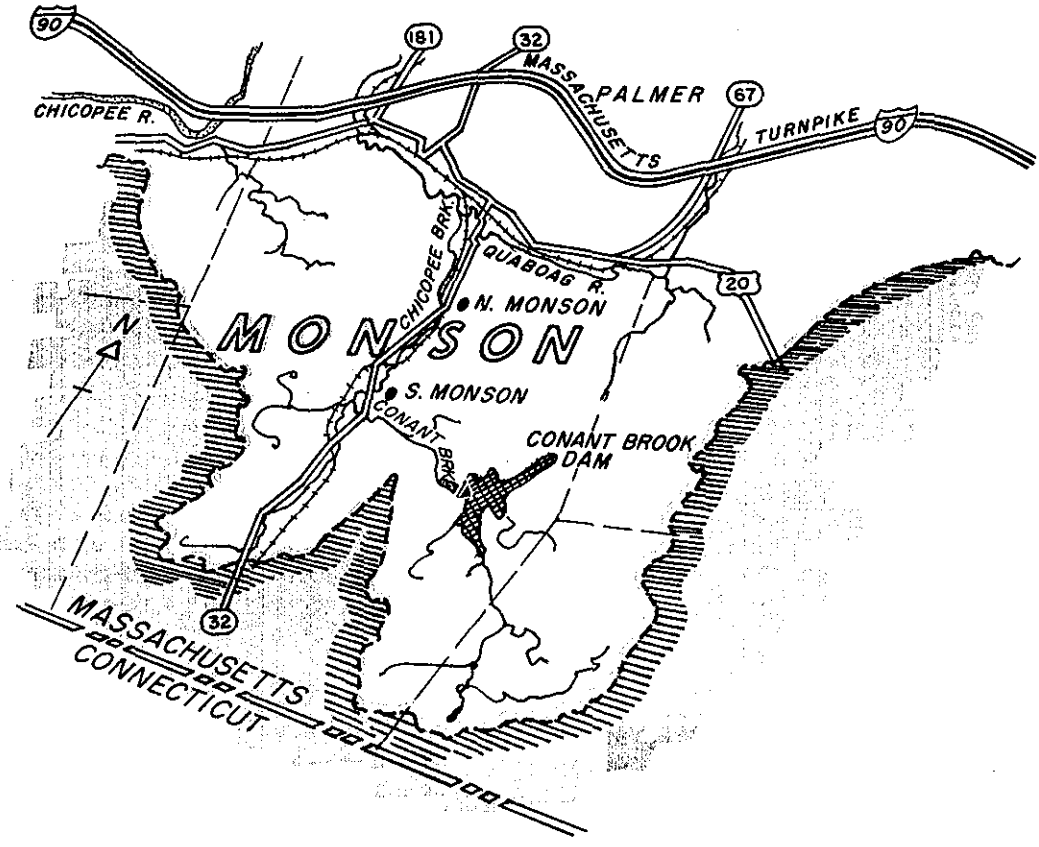
FLOOD PLAIN INFORMATION

CHICOPEE AND CONANT BROOKS MONSON, MASSACHUSETTS

(SUMMARY REPORT)



U.S. Army Engineer Division, New England
Corps of Engineers Waltham, Mass.

DECEMBER 1963

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FLOOD PLAIN INFORMATION

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Since time began, heavy rains and melting snows have periodically changed small brooks and peaceful rivers into raging torrents which overflow their banks and endanger whatever lies on the nearby lowland. Before man found reason to build and live on these plains, floods were of little consequence; but with the coming of civilization and the occupation of these lands, floods frequently result in disaster to individuals, their families and their communities. The photos on the back cover of this pamphlet show typical effects of the disaster that struck Monson.

In terms of geological time severe floods are a frequent occurrence. In terms of a man's life, they are rare - rare enough to dull the memories of destruction and to allow him to build on land which he is vaguely aware may possibly be subject to some sort of flood hazard.

During the last 25 years, the Federal Government has spent huge sums of money to reduce the human suffering and property damages that are caused by floods. The dikes, floodwalls and flood control reservoirs that have resulted have more than paid for themselves. Nonetheless, flood losses today are as great, if not greater, than ever before because of man's continuing encroachment on the flood plain. People, often without realizing the risk, are constructing new developments in flood prone areas and are reducing channel capacities by filling in flood channel

areas. Examples can be found in most every riverside community. Flood hazards are thereby increased and the effectiveness of existing flood control works is correspondingly diminished.

Development in the flood plain is taking place today in Monson such as the new homes in the Maple Lawn Drive and Silva Street areas. In addition, filling of the flood plain is taking place downstream of the railroad bridge near Chestnut Street and also downstream of the junction of Toby and Palmer Roads. Damage to the existing developments would only be a disaster to the individual owners, but if developments are permitted to proceed uncontrolled, a general disaster could happen with the next flood.

To assist communities in preventing this type of problem, Congress has authorized the Corps of Engineers to disseminate information on flood hazards and make criteria available for planning the beneficial use of areas subject to inundation. Information of this type is provided upon request, with a view towards aiding State and local authorities in establishing regulations for the use of such areas.

In addition, the Water Resources Commission of the Commonwealth of Massachusetts has been given authority to establish a floodway in Monson. This floodway will reserve the lower portion of the valley for the free movement of flood waters and prevent encroachment on the river channel below the proposed Conant Brook flood control dam.

At the request of the Water Resources Commission, a technical

flood plain information report has been prepared by the Corps of Engineers for Conant and Chicopee Brooks in Monson. It is intended to assist the Commission in establishing the limits of the floodway, to encourage the town to enact appropriate flood plain zoning regulations and to aid property owners in weighing the advisability of further development or construction in the flood plain. Copies of the technical report are available for review at the Monson Town Hall or upon request to the Commonwealth of Massachusetts Water Resources Commission, 73 Tremont Street, Boston 8, Massachusetts.

This pamphlet has been prepared for wider public dissemination, both to create a general awareness of the continuing flood problem in Monson and to help insure that future development in the flood plain will be made with knowledge of the potential flood risks and hazards. The three maps included in this pamphlet show the areas that will be flooded if a storm similar to the August 1955 storm occurs after construction of the Conant Brook Dam. Since that flood is considered rare, a lesser flood, one which it is estimated will occur an average of ten times in a 500-year period, after the construction of Conant Brook Dam, is also shown.

The two floods shown on the maps are intended to serve only as general guides. There can, of course, be no assurance that a flood greater than the August 1955 flood will not occur in the near future, nor can it be guaranteed that the smaller flood will not occur more than once inside the next 50 years. It should, therefore, be clear that prudent land use would establish facilities such as parks and recreation areas where

flooding is most apt to be frequent and to either avoid construction altogether or take necessary precautions where serious economic loss would result from inundation. Future flood damage may also be reduced by keeping streambeds and their adjacent flood plains free from dumping, fallen trees, undergrowth and debris which create bottlenecks and reduce the stream's capacity to carry flood flows.

There is much that an individual can do to protect his property if it is located in the flood plain. The most common precautions are waterproofing walls, closing unnecessary openings in walls and putting valves on sewer and drainage lines. In many cases, basement flooding can be eliminated by regrading the land around an existing building or inclosing it with a low wall and proper drainage.

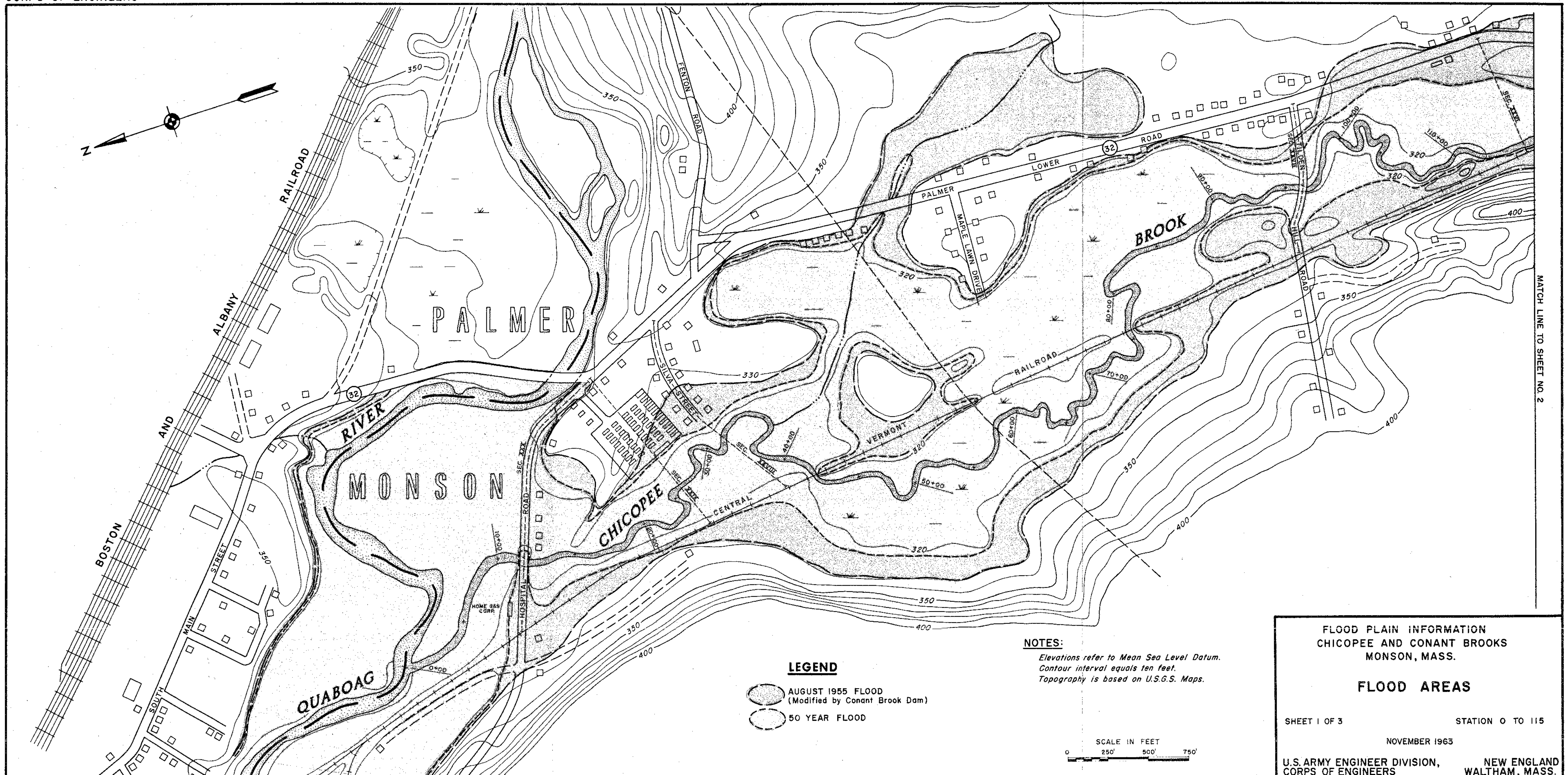
There is no ultimate solution to the general problem of preventing flood damages. The Federal Government, through the Corps of Engineers, is actively engaged in a widespread flood control construction program. But, the extent of protection provided by these facilities and other governmental programs is limited by economic considerations and the extent of legislative authorities. In spite of these projects, no area is completely free of a flood threat and many areas are unable to qualify for any flood protection works.

The most promising possibility for the prevention of additional flood damages is in the area of careful advance planning on the part of those most likely to be affected in the event of flood. It has been demonstrated time and time again that preventive measures must be taken

in advance of the emergency, for after a flood rise has started, particularly in New England where streams are notably "flashy", countermeasures are usually too late to be effective. It is therefore urged, in the strongest possible terms, that past lessons be remembered. If not, rivers when on the rampage, have a habit of asserting their own real estate rights in flood plain areas.

"IT WASN'T RAINING WHEN NOAH BUILT THE ARK".

CORPS OF ENGINEERS U.S. ARMY



LEGEND

AUGUST 1955 FLOOD (Modified by Conant Brook Dam)

50 YEAR FLOOD

NOTES:

Elevations refer to Mean Sea Level Datum.
Contour interval equals ten feet.
Topography is based on U.S.G.S. Maps.

FLOOD PLAIN INFORMATION
CHICOPEE AND CONANT BROOKS
MONSON, MASS.

FLOOD AREAS

SHEET 1 OF 3 STATION 0 TO 115

NOVEMBER 1963

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS WALTHAM, MASS.

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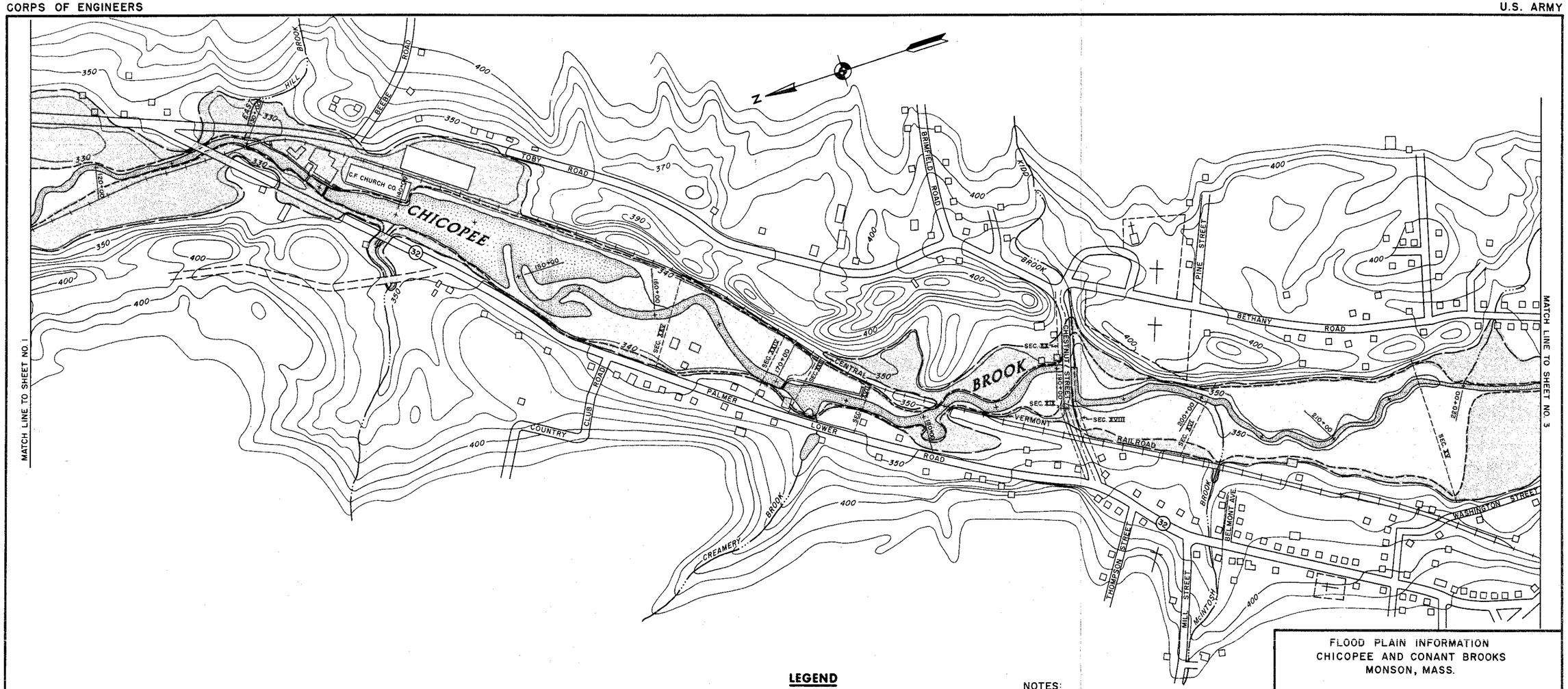

LEGEND

AUGUST 1955 FLOOD
(Modified by Conant Brook Dam)

50 YEAR FLOOD

NOTES:

Elevations refer to Mean Sea Level Datum.
Contour interval equals ten feet.
Topography is based on U.S.G.S. Maps.

SCALE IN FEET
0 250' 500' 750'

FLOOD PLAIN INFORMATION
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FLOOD AREAS

SHEET 2 OF 3 STATION 115 TO 225

NOVEMBER 1963

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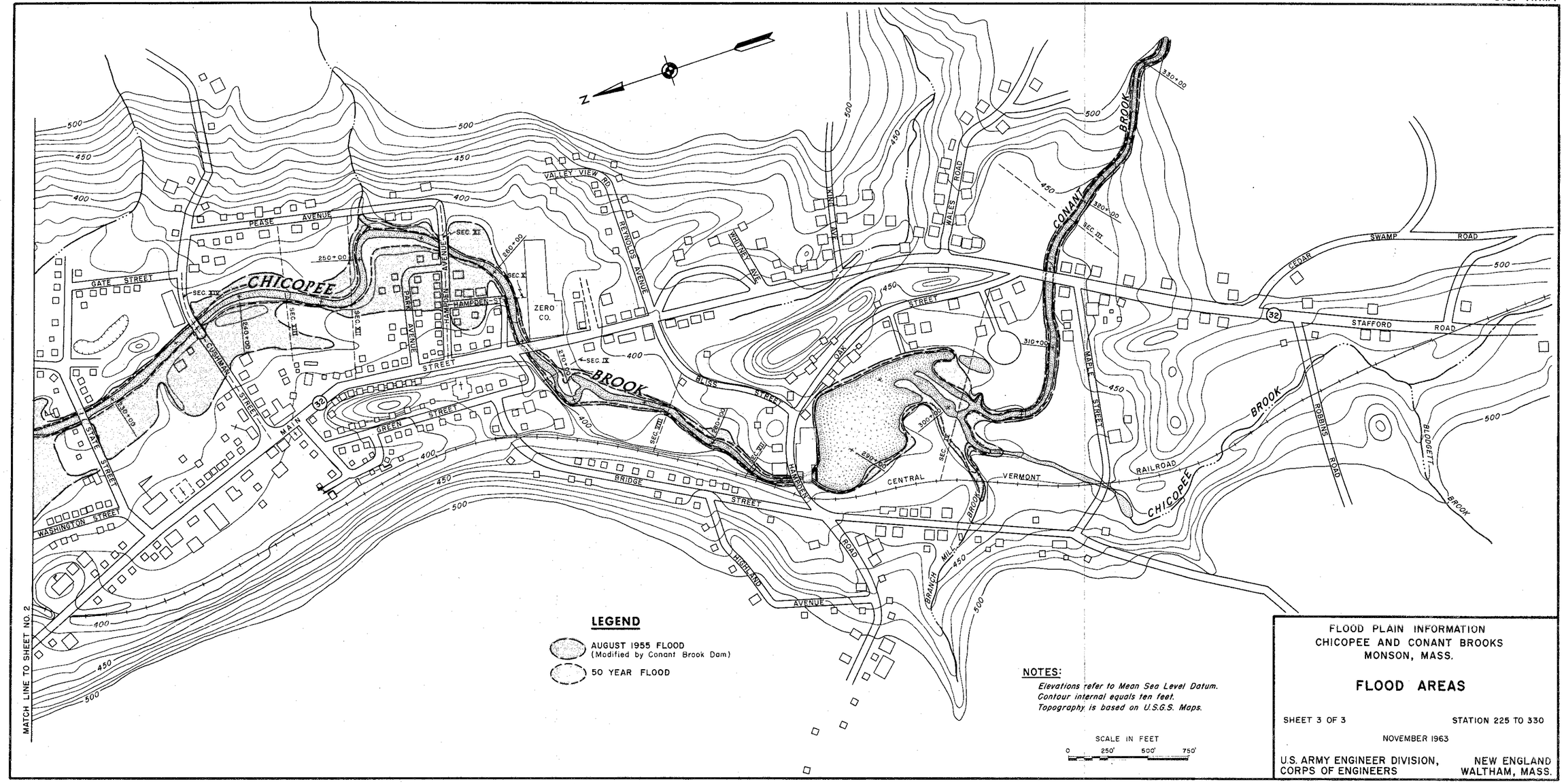

LEGEND

AUGUST 1955 FLOOD
(Modified by Conant Brook Dam)

50 YEAR FLOOD

NOTES:

Elevations refer to Mean Sea Level Datum.
Contour internal equals ten feet.
Topography is based on U.S.G.S. Maps.

SCALE IN FEET
0 250' 500' 750'

FLOOD PLAIN INFORMATION
CHICOPEE AND CONANT BROOKS
MONSON, MASS.

FLOOD AREAS

SHEET 3 OF 3 STATION 225 TO 330

NOVEMBER 1963

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
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REMEMBER ?

AUGUST 1955